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| 09/813,099 | 03/19/2001 | Ylian Saint-Hilaire | 10559-430001 / P10444 | 8074 |
| 20985 | 7590 | 03/01/2005 | EXAMINER | |
| FISH & RICHARDSON, PC 12390 EL CAMINO REAL SAN DIEGO, CA 92130-2081 | | | JAGANNATHAN, MELANIE | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2666 | |

DATE MAILED: 03/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/813,099

Applicant(s)

SAINT-HILAIRE ET AL.

Examiner

Melanie Jagannathan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-9,11,12,14-18,20,21 and 23-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9,11,12,14-18,20,21 and 25-28 is/are allowed.
- 6) ☒ Claim(s) 1,3-8,23,24 and 29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3-8, 23-24 are rejected under 35 U.S.C. 102(e) as being anticipated by
Agraharam et al. US 6,407,988.

Regarding claims 1, 3, 7, 23, the claimed establishing and maintaining an interruption-free communication path between a mobile device in a first communication area and a server through a home agent, the mobile device initially being assigned a set of addresses when registered with the home-agent, the home-agent using the assigned addresses to track the mobile-device is disclosed by mobility-aware IP network with home and foreign agents providing mobility services to mobile hosts, providing continuous services to users as they travel from network to network. A home agent (Figure 1, element 104.1) maintains a database regarding each mobile host (element 100.1) with its home address, virtual home address and a care-of-address for a currently visited network or previously visited network. See column 2, lines 26-63, column 4, lines 5-12. The claimed mobile-device requesting a new address from a server and communicating the new address to the home agent is disclosed by registration of mobile host (Figure 5, element 100.1) in a foreign network (element 120.8), the mobile host sends a DHCP message (step 510) to foreign agent (element 104.3) which forwards (step 520) it to the DHCP

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(element 105.2), the DHCP processes the message, allocates a temporary foreign address on foreign network for mobile host and sends a reply message identifying temporary foreign address (step 530).

Regarding claims 4,6, the claimed assigning a home address associated with home agent to mobile device is disclosed by home address for mobile host. The claimed assigning a first real-address associated with a first communication area to mobile device is disclosed by temporary foreign address for previously visited foreign network. See column 2, lines 26-63, column 4, lines 5-12. Regarding claims 4, 8, the claimed detecting the mobile-device's movement into second communication area is disclosed by mobile host registers with foreign network and determines that the network is not its home network. See column 6, lines 66-67, column 7, lines 1-2.

Regarding claims 5-6, 24, the claimed assigning a second real address associated with second communication area is disclosed by DHCP allocating a temporary foreign address on foreign network for mobile host and sends a reply message identifying temporary foreign address (Figure 5, step 530).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

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claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Agraharam et al. in view of Kuhnel et al. US 6,240,078.

Agraharam et al. disclose a multi-network Internet system using IP addressing. Agraharam et al. does not disclose a protocol other than TCP/IP also enabled to establish the communication path and maintain the communication path.

Kuhnel et al. discloses wireless ATM network with mobility control for handovers in ATM connections, redirection of virtual channels. ATM is at a lower layer than TCP/IP. At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify mobile IP of Inoue et al. with ATM mobility of Kuhnel et al. One of ordinary skill in the art would be motivated to do this since Kuhnel et al. mobility enhancements allow for lossless or seamless handover during cell movement.

Allowable Subject Matter

5. Claims 9, 11-12, 14-18, 20-21, 25-28 are allowed.

6. The following is a statement of reasons for the indication of allowable subject matter: Prior art of record does not disclose, in single or in combination, generating a request from

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mobile device, the request comprising a request-layer including a home address of the mobile device and a server address, encapsulating the request layer with a roaming layer including a real address of mobile device and a home agent address, communicating the encapsulated request layer to home agent based on home agent address, using a program layer below a TCP/IP program layer in mobile device to generate the request, encapsulate the request layer and communicate the encapsulated request layer, removing the roaming layer, communicating the request layer from the home agent to a server based on the server address.

Response to Arguments

7. Applicant's arguments with filed 1/24/2005 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Toth et al. US 5,708,655 disclose addressing a wireless communication station with a dynamically assigned address.

Khalil et al. US 6,578,085 route optimization in a wireless Internet protocol network.

Inoue et al. US 6,587,882 discloses mobile IP communication scheme using visited site or nearby network as temporal home network.

Lee et al. US 6,535,493 disclose mobile Internet communication protocol.

Perkins et al., Using DHCP with Computers that Move.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Jagannathan whose telephone number is 571-272-3163.

The examiner can normally be reached Monday-Friday 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3163.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJ

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FRANK DUONG
PRIMARY EXAMINER